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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,194	11/02/2001	Ketankumar B. Patel	01CON231P	4343

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EXAMINER

BRINEY III, WALTER F

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/016,194	Applicant(s) PATEL, KETANKUMAR B.	
	Examiner Walter F Briney III	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37.CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,11,12,15,16 and 19 is/are rejected.
- 7) ☒ Claim(s) 6-10,13,14,17,18,20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 February 2005 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1, 3-5, 11, 12, 15, 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Simokat et al. (US Patent 3,968,333).**

Claim 1 is limited to a *DC driver circuit coupled to a tip/ring line*. Simokat discloses a battery charger control circuit for telephone transmission systems. See Abstract. The control circuit includes a *first capacitor (C2)* coupled to a *first switch (52)* that is coupled to an amplification circuit (Q1), which is coupled to the tip/ring line at point (51a). The circuit further includes an *RC circuit* consisting of a *second capacitor (C3)* and *at least one resistor (R5)*. The *RC circuit* is coupled to a *second switch (70)*,

which is clearly also coupled to the *first switch* (52). When the *second switch*, also known as a hook switch, is closed, the voltage across loop (24) drops to a value of about 30 V DC. This results in the voltage at the gate of the *first switch* (52) to fall below a predetermined value, thus enabling conduction of current through the switch, i.e. *said first switch and said second switch being closed during a make state*. This results in activating *amplifier* (Q1), which closes a current path of the tip/ring line from point 51 to point 51a. See column 7, lines 18-33. The opening of hook switch (70) causes the *first switch* (52) amplifier (Q1) to cutoff, i.e. *said first switch and said second switch being open during a break state to prevent said amplification circuit from drawing current from said tip/ring line*. See column 6, line 59 through column 7, line 7. Simokat further discloses a *third switch* (64) connected in parallel with the *first capacitor* (C2) so as to regulate the voltage across the capacitor (C2). Since the third switch (64) and first capacitor (C2) are in parallel they both are connected to a *power supply* through resistor R3 at a *first terminal* and are also *connected together* at a *second terminal*. The third switch (64) provides a constant voltage drop as defined by the intrinsic junction voltage of the diode. As such, *the third switch* (64) *is closed during a break state to precharge said first capacitor* (C2). See column 5, lines 20-25. Simokat discloses that the *first capacitor* (C2) transfers charge to the *second capacitor* (C3) during a make state, defined partially by *first switch* (52) being closed. See column 7, lines 34-41. As seen in the figure, the *RC circuit*, *first switch*, and *amplification circuit* share a *common node*, and the *rate of discharge* can inherently be affected by changing any component *value*. Therefore, Simokat anticipates all limitations of the claim.

Claim 3 is limited to *the DC driver circuit of claim 1*, as covered by Simokat. As seen in the figure of Simokat, the *second capacitor (C3)* is connected to the base terminal of *amplifier (Q1)* at a *first terminal* and to the effective *ground point (51a)* at a *second terminal*. Therefore, Simokat anticipates all limitations of the claim.

Claim 4 is limited to *the DC driver circuit of claim 3*, as covered by Simokat. Simokat indicates that the *first capacitor (C2)* has a capacitance far greater than that of the *second capacitor (C3)*. See column 7, lines 38-41. Therefore, Simokat anticipates all limitations of the claim.

Claim 5 is limited to *the DC driver circuit of claim 1*, as covered by Simokat. As seen in the figure of Simokat, the RC circuit includes at least one *resistor (R5)* that has a *first terminal* coupled to the base terminal of *amplifier (Q1)* and a *second terminal* connected to the effective *ground point (51a)*. Therefore, Simokat anticipates all limitations of the claim.

Claims 11, 12, and 19 are limited to essentially the same subject matter as claim 1, as covered by Simokat, and are rejected for the same reasons.

Claim 15 is limited to *the circuit of claim 11*, as covered by Simokat. When the *first switch (52)* is conducting, i.e. *closed during a make state*, the *first capacitor (C2)* clearly forward biases the *at least one transistor (Q1)*. Therefore, Simokat anticipates all limitations of the claim.

Claim 16 is limited to *the circuit of claim 15*, as covered by Simokat. When the *first switch (52)* is not conducting, i.e. *open during a break state*, the RC circuit (C1 and R5) maintains a forward bias on the *at least one transistor (Q1)* for a time defined by the

RC time constant of the *RC circuit*. Therefore, Simokat anticipates all limitations of the claim.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

2. **Claims 6-10, 13, 14, 17, 18, 20 and 21** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 6 is limited to *the DC driver circuit of claim 1*, as covered by Simokat.

There is clearly no op-amp depicted by Simokat. Therefore, Simokat anticipates all limitations of the claim with the exception *wherein said amplification circuit comprises an op amp coupled to a first transistor*. Thus, claim 6 is allowable over Simokat.

Claim 8 is dependent on claim 6, and is allowable over Simokat for at least the same reasons.

Claim 7 is limited to *the DC driver circuit of claim 1*, as covered by Simokat.

There is clearly no op-amp depicted by Simokat. Therefore, Simokat anticipates all limitations of the claim with the exception *wherein said amplification circuit comprises an op amp coupled to a first transistor*. Thus, claim 7 is allowable over Simokat.

Claim 9 is dependent on claim 7, and is allowable over Simokat for at least the same reasons.

Claim 10 is limited to *the DC driver circuit of claim 1*, as covered by Simokat. It is clear from the figure that the tip/ring line generated at the output of the bridge rectifier

is not connected to a modem, but to a battery charger. Therefore, Simokat anticipates all limitations of the claim with the exception *wherein said tip/ring line is coupled to a modem*. Thus, claim 10 is allowable over Simokat.

Claim 21 is limited to essentially the same subject matter as claim 10, and is allowable over Simokat for at least the same reasons.

Claim 13 is limited to *the circuit of claim 11*, as covered by Simokat. There is clearly no op-amp depicted by Simokat. Therefore, Simokat anticipates all limitations of the claim with the exception *wherein said at least one transistor (Q1) is driven by an op amp*. Thus, claim 13 is allowable over Simokat.

Claims 14, 17, 18, and 20 are dependent on claim 13, and are allowable over Simokat for at least the same reasons.

Response to Arguments

Applicant's arguments with respect to claims 1 and 3-21 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WFB
4/11/05



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SUPERVISORY PATENT EXAMINER